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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,320	07/28/2003	Derick Arippol	ARIP.P0001	6583
23349	7590	09/21/2005		
STATTLER JOHANSEN & ADELI P O BOX 51860 PALO ALTO, CA 94303			EXAMINER EDWARDS, ANTHONY Q	
			ART UNIT 2835	PAPER NUMBER

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/629,320

Applicant(s)

ARIPPOL, DERICK

Examiner

Anthony Q. Edwards

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8 and 10-15 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,150,279 to Collins et al. ("Collins" hereinafter). Referring to claim 1, Collins discloses an assembly (see Figs. 3 and 12) for housing a computer system, wherein the assembly comprises a housing (20), wherein the housing comprises a plurality of railings (22), a plurality of computer modules (23) attached to the housing railings, wherein the modules are integrated to form the computer system, and a power supply (see Fig. 18), wherein the power supply provides power and ground to the railings. See col. 6, lines 13-20 and col. 8, lines 7-10.

Referring to claim 2, Collins discloses an assembly, wherein the housing is open to the environment (see Fig. 3).

Referring to claim 3, Collins discloses an assembly including one, two or three layers. See Fig. 20 and col. 8, lines 21-29.

Referring to claim 4, Collins discloses an assembly, wherein the housing does not require a compact motherboard-CPU configuration (i.e., the horizontal stacking of modules (23) does not limit the assembly to any minimum height requirement).

Referring to claim 5, as seen in Fig. 4, Collins discloses an assembly constructed as separate segments that can be joined together to act as one unit.

Referring to claim 6, as seen in Figs. 3 and 12, Collins discloses an assembly having a cylindrical shape.

Referring to claim 8, Collins discloses an assembly wherein the computer modules (30) are attached by hanging the computer modules from the railings (22). See Fig. 12.

Referring to claim 10, Collins discloses an assembly further comprising a connection kit. See Fig. 5, wherein connectors are provided on the module (23).

Referring to claim 11, Collins discloses an assembly including two layers. See Fig. 20 and the corresponding specification.

Referring to claims 12 and 13, Collins discloses an assembly constructed as four separate segments that can be joined together. See Figs. 3 and 4, which show a range of eight (8) separate segments to one (1) separate segment, respectively, which can be joined together. Four (4) separate segments, usable together, falls within that range.

Referring to claim 14, Collins discloses an assembly wherein the computer modules (30) are hung using a frame (not numbered) that is structurally connected to the modules (see Fig. 13).

Referring to claim 15, Collins discloses an assembly, wherein each segment is self-sufficient. See Fig. 15 and col. 7, lines 1-30.

Referring to claim 16, Collins discloses an assembly wherein the computer modules (30) do not include a case. See Figs. 12 and 13.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins. Referring to claim 9, Collins discloses the assembly as substantially claimed (see Fig. 20, which shows DC-DC power supplies within the assembly). Collins does not, however, specifically teach the power supply having a first stage and a second stage, the first stage converting a first voltage that is converted into a second voltage, wherein the second voltage is provided to the second stage, and wherein the second stage creates a third voltage that is suitable for the circuit board from the second voltage. It is notoriously old and well known in the art computer systems to provide “step-down” power conversion from one stage to a second stage and a third stage, so that voltage is converted from a first to a second to a third voltage, respectively.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize “step-down” power conversion for the power supply of the computer assembly of Collins to insure proper, i.e., lower, voltage is used on the circuit board(s) in the system, as opposed to the rails, etc.

Referring to claim 18, Collins discloses the assembly as substantially claimed, except for the first stage being the only part of the power supply that provides power to the rails. It is notoriously old and well known in the art computer systems to utilize “step-down” power

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conversion in a manner wherein the highest voltage output is restricted to the main part of the system, e.g., the rails.

Referring to claim 19, Collins, as modified, discloses the assembly as claimed, wherein stages of the "step-down" is activated by a signal coming from a motherboard. See Fig. 11a-11b and the corresponding specification, wherein a logic board provides signal distribution as needed to the system.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collins in view of U.S. Patent No. 4,600,231 to Sickles. Collins discloses the assembly as claimed, except for the housing further comprising a plurality of columns and the columns are coupled to the railings. Sickles teaches providing a carrier for self-supporting printed circuits boards (see Figs. 2 and 7), wherein the carrier includes columns (54) coupled to railings (28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the railing assembly of Collins with columns attached to the railings, as taught by Sickles, since the device of Sickles would provide more stability for the assembly of Collins.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collins in view of U.S. Patent No. 5,060,111 to Takashima. Collins discloses the assembly as claimed, except for each segment comprising a cooling system and wherein the cooling system is a single fan. Takashima teaches providing a fan-cooled system (see Fig. 1) for a radial or cylindrical shaped computed assembly having modules (2) attached thereto.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the assembly of Collins with a fan for cooling the system, as taught by

Takashima, since the device of Takashima would allow for more efficient computing of the assembly of Collins by cooling vital elements when needed.

Allowable Subject Matter

Claims 8, 14 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: referring to claim 8, it would not have obvious at the time of the invention to attach the modules by hanging the same from the railings of the assembly. Claims 14 and 16 depend, either directly or indirectly, from claim 8 and are therefore allowable for at least the same reasons.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Q. Edwards whose telephone number is 571-272-2042. The examiner can normally be reached on M-F (7:30-3:00) First Friday Off.

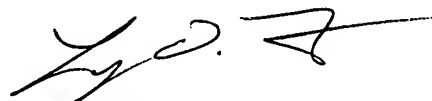
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild can be reached on 571-272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 19, 2005

aqe



LYNN FEILD
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